

## 101.6 - Stainless Steels (chip form) [150-g units (unless otherwise noted)]

Technical Contact: [john.sieber@nist.gov](mailto:john.sieber@nist.gov)

PLEASE NOTE: The tables are presented to facilitate comparisons among a family of materials to help customers select the best SRM for their needs. For specific values and uncertainties, the certificate is the only official source.

| SRM           | 73c                           | 101g                        | 121d   | 123c                                 | 133b                      | 160b  | 166c                                    | 339                                | 343a                       |
|---------------|-------------------------------|-----------------------------|--|--------------------------------------|---------------------------|---|---|------------------------------------|----------------------------|
| Description   |                               |                             |  |                                      |                           |   |   |                                    |                            |
|               | Stainless Steel, Cr (SAE 420) | Stainless Steel (AISI 304L) | Stainless Steel, (Cr 17-Ni 11-Ti 0.3) (AISI 321) | Stainless Steel, Cr-Ni-Nb (AISI 348) | Chromium-Molybdenum Steel | Stainless Steel (Cr 18-Ni 12-Mo 2) (AISI 316) | Stainless Steel, Low-Carbon (AISI 316L) | Stainless Steel, Cr-Ni-Se (SAE 30) | Stainless Steel (AISI 431) |
| Unit of Issue | (150 g)                       | (100 g)                     | (150 g)  | (150 g)                              | (150 g)                   | (150 g)                                       | (100 g)                                 | (150 g)                            | (150 g)                    |

|    |       |        |         |       |       |        |         |       |        |
|----|-------|--------|---------|-------|-------|--------|---------|-------|--------|
| C  | 0.310 | 0.0136 | 0.067   | 0.056 | 0.128 | 0.0445 | 0.00781 | 0.052 | 0.149  |
| Mn | 0.330 | 0.085  | 1.81    | 1.75  | 1.07  | 1.619  |         | 0.738 | 0.42   |
| P  | 0.018 | 0.007  | (0.019) | 0.024 | 0.018 | 0.0200 |         | 0.129 | 0.026  |
| S  | 0.036 | 0.0078 | (0.013) | 0.014 | 0.328 | 0.0175 |         | 0.013 | 0.001  |
| Si | 0.181 | 1.08   | 0.536   | 0.59  | 0.327 | 0.5093 |         | 0.654 | 0.545  |
| Cu | 0.080 | 0.029  | 0.1205  | 0.103 | 0.080 | 0.175  |         | 0.199 | 0.162  |
| Ni | 0.246 | 10.00  | 11.18   | 11.34 | 0.230 | 12.35  |         | 8.89  | 2.16   |
| Cr | 12.82 | 18.46  | 17.50   | 17.40 | 12.63 | 18.37  |         | 17.42 | 15.64  |
| V  | 0.030 | 0.041  |         |       | 0.071 | 0.050  |         | 0.058 | 0.056  |
| Mo | 0.091 | 0.004  | 0.167   | 0.22  | 0.052 | 2.26   |         | 0.248 | 0.164  |
| N  | 0.037 |        |         |       | 0.05  | (0.04) |         |       |        |
| Co |       | 0.09   | 0.097   | 0.12  |       | 0.109  |         | 0.096 | (0.04) |
| Ti |       |        | 0.346   |       |       |        |         |       | (      |
| Nb |       |        |         | 0.65  |       |        |         |       | (0.01) |

| SRM           | 73c                           | 101g                        | 121d   | 123c                                 | 133b                      | 160b  | 166c                                    | 339                                | 343a                       |
|---------------|-------------------------------|-----------------------------|--|--------------------------------------|---------------------------|---|---|------------------------------------|----------------------------|
| Description   |                               |                             |  |                                      |                           |   |   |                                    |                            |
|               | Stainless Steel, Cr (SAE 420) | Stainless Steel (AISI 304L) | Stainless Steel, (Cr 17-Ni 11-Ti 0.3) (AISI 321) | Stainless Steel, Cr-Ni-Nb (AISI 348) | Chromium-Molybdenum Steel | Stainless Steel (Cr 18-Ni 12-Mo 2) (AISI 316) | Stainless Steel, Low-Carbon (AISI 316L) | Stainless Steel, Cr-Ni-Se (SAE 30) | Stainless Steel (AISI 431) |
| Unit of Issue | (150 g)                       | (100 g)                     | (150 g)  | (150 g)                              | (150 g)                   | (150 g)                                       | (100 g)                                 | (150 g)                            | (150 g)                    |

|    |  |         |  |  |  |           |  |            |    |
|----|--|---------|--|--|--|-----------|--|------------|----|
| Ta |  |         |  |  |  |           |  | Al (0.001) |    |
| Pb |  |         |  |  |  | (0.001)   |  | (          |    |
| Se |  |         |  |  |  |           |  | 0.247      | B( |
| W  |  | (0.012) |  |  |  | (0.11)    |  |            |    |
| As |  |         |  |  |  | 0.01067   |  |            |    |
| Bi |  |         |  |  |  | (<0.0005) |  |            |    |

Values in parentheses are given for information only.

**101.6 - Stainless Steels (chip form) [150-g units (unless otherwise noted)]**Technical Contact: [john.sieber@nist.gov](mailto:john.sieber@nist.gov)

PLEASE NOTE: The tables are presented to facilitate comparisons among a family of materials to help customers select the best SRM for their needs. For specific values and uncertainties, the certificate is the only official source.

**893            895****Stainless Steel (SAE 405)            Stainless Steel (SAE 201)****(150 g)            (150 g)**

|           |         |
|-----------|---------|
| 0.027     | 0.066   |
| 0.378     | 7.09    |
| 0.022     | 0.038   |
| 0.0003    | 0.0033  |
| 0.326     | 0.399   |
| 0.261     | 0.439   |
| 0.192     | 5.34    |
| 13.55     | 16.72   |
| 0.080     | 0.079   |
| 0.023     | 0.337   |
| Al (0.20) | W(0.03) |
| 0.020     | 0.126   |
| (0.01)    | (       |
| (         | (       |

**893            895****Stainless Steel (SAE 405)            Stainless Steel (SAE 201)****(150 g)            (150 g)**

|          |          |
|----------|----------|
| (        | (        |
| (0.0001) | (0.0001) |
| (        | (        |

Values in parentheses are given for information only.